5/13/03

For Official Use Only - Familiarization Tour Script

Walking Tour of External Area Inside Fence

Portal Monitor in JN-6 - All visitors must pass through the monitor before the tour to assure no medical isotopes or other sources are present.

Orient people North, South, East, West

1. Non Project Area
The Battelle facilities located at the West Jefferson North site which are not part of the project are north of the access road. The exception to this is that walkover surveys of the soil areas have not yet been done.

2. Project Area
The Project Area inside the perimeter fence includes the access road and land and facilities south of the access road. The total area inside the perimeter fence is 11.5 Acres. Outside of the perimeter fence, the project includes filter bed areas located east of this fenced area. As mentioned earlier, radiological conditions are being posted on the web site.

3. Building JN-6
JN-6 is the Guard House. The second floor is used as an Emergency Command Center.

4. Trailer JNT-1
JNT-1 is located east of the entrance to the fenced in area. The JNT-1 Dosimetry Trailer is DOE owned. It is currently being used by the Battelle Columbus Laboratories Decommissioning Project (or BCLDP). You may open the door and look inside from the doorway if you wish. Please do not go inside and walk around.

STOP

5. Building JN-1
JN-1 is the building with three different heights, to the southeast. It was constructed at three different times. The original construction is called JN-1A and is the structure in the center, between the High Bay Area, called JN-1B, to the north and the single story office area to the south. JN-1 contained the hot cells with manipulators and the 48 ft deep pool to support Battelle=s research work. The Control Point for the BCLDP is in the old office area to the south. We will complete the Radiation Work Permit sign-in sheet at the Control Point before we tour JN-1.

STOP

6. Building JN-2
JN-2 is the building west of JN-1. A Radio-Analytical Laboratory (or RAL), which supports the BCLDP, is located on the first floor. Additional current uses of JN-2 include storage in a High Bay area, lockers, rest rooms and offices. We will go inside JN-2.

7. Building JN-3
JN-3 is the building north of JN-2. Building JN-3 once contained an operating nuclear reactor. The reactor is gone, much of the reactor shielding is gone, and a decontamination process has been used in the building, except for a few isolated spots. JN-3 has lockers, toilet facilities and offices which are currently used by the BCLDP project. The JN-3 Annex is attached to the building on the west side. The Annex currently houses a functional machine shop which is used by the project. We will go inside JN-3.

STOP

8. Access Road, JN-1 Front Apron and Concrete Supports East of JN-3
The access road leads from the parking lot into the West Jefferson North site and to the paved area west of building JN-1, which is called the JN-1 Front Apron. The road also runs north of JN-1 and provides access to the filter bed areas east of this fenced area. The Concrete Supports east of JN-3 were poured to enable installation of additional modular facilities.

9. JN-3 Reactor Coolant Pump Tank
The large concrete square north of building JN-3 is the top of the JN-3 Reactor Coolant Pump Tank. It is an underground concrete tank. It has been emptied of water and solids and a decontamination process was used.

STOP

10. Sea/Land Containers
Storage containers such as these west of the JN-1 Front Apron are called Sea/Land containers. Sea/Land containers are being used to store supplies and materials supporting the BCLDP.

11. Old Guard House Located East of JN-2
The old guard house located east of JN-2 is currently being used to support the BCLDP environmental monitoring program.

12. Trailer JNT-3
JNT-3 is located near the entrance to JN-1. The JNT-3 Storage Trailer is DOE owned. You may open the door and look inside from the doorway if you wish. Please do not go inside and walk around.

STOP

13. Trailer JNT-2
The JNT-2 Break Trailer is also located near the entrance to JN-1. The JNT-2 Break Trailer belongs to Battelle. You may open the door and look inside from the doorway if you wish. Please do not go inside and walk around.

14. JN-1 Diesel Fuel Storage Tank Fill Location
The JN-1 Diesel Fuel Storage Tank Fill Location is south of the walkway entering JN-1. The Diesel Fuel Storage Tank itself is located underground on the southeast side of JN-1. It is currently being used.

15. North Well House
The North Well House is the small brick building located southeast of JN-1. It provides a pumping station and water softening for West Jefferson North.

STOP

16. Various Wells
Three types of wells can be seen on the site. Locations of wells for environmental sampling are in the environmental reports posted on the web site. Locations of wells for evaluating the groundwater and for dewatering by pumping groundwater are shown in a report being posted on the web site. The larger diameter wells have pumps installed.

17. JN-2 Electrical Substation
The JN-2 Electrical Substation is located north of building JN-2. It is currently in use.

STOP

18. Walkthrough of JN-2 First and Second Floors
The Radio-Analytical Laboratory (or RAL) is on the right. The RAL analyzes radioactive samples. It is the principle operation in JN-2 which involves radioactive materials.
I will open the doors to the RAL so you can look in if you wish. Please do not go beyond the radiological control indicators.

STOP

There are rest rooms and lockers on the first floor. (Allow time to look around.)

STOP

The room on the south side of the first floor is constructed as a vault.

STOP

The High Bay Area is used to store materials and equipment which support the BCLDP. (Allow

time to look around.)

STOP

The 2nd floor is primarily offices. (Allow time to look around.)

STOP

19. JN-3 as Viewed from First Floor on the Southwest side.

The Pump Room is located on the lower level in the northeast corner of JN-3, diagonally across from where we are standing.

The reactor was located east of the center of the building.

JN-3 dewatering wells, piping and pumps have been installed as seen on the ground floor below us. This dewatering system is operational. The floors in the Pump Room and the previous reactor area are now dry. Previously, wet spots were common. Dewatering is also being considered for areas in JN-1.

A decontamination process has been used for building JN-3. Examples of isolated contamination spots in JN-3 include the overhead crane hook and the base of a vertical support I-Beam in the Pump Room.

STOP

Control Point - Hand out safety toes as needed, read PICs, sign RWP, hand out hard hats stored at Control Point.

20. Building JN-1 Walkthrough (Need Lights on in all areas discussed.)
As previously stated, the Ohio Field Office web site is providing radiological conditions including smearable and fixed contamination, gamma readings and hot particle potential inside the buildings.

Office Area - This is the office area and in this office area partitions have been removed and a decontamination process has been used.

STOP

It can be seen where the office area was added to the original building. Facing north, the brick wall is part of the original JN-1A construction. The subsequent office addition, including a machine shop, is south of that wall.

STOP

Former Chemical Laboratory - Excavation has been done in the Former Chemical Laboratory to remove undergound lines.

STOP

Former Machine Shop - The sump in the Former Machine Shop has been excavated. The contaminated contents of the sump have been removed and the upper parts of the sump walls have been demolished and removed. The bottom section of the sump remains. The PVC pipe is there to enable measurement of the depth of the water. Also, excavation has been done on the north side to remove underground lines.

STOP

Mechanical Room - The mechanical room is part of the original building construction.

STOP

21. Exit the back door of JN-1

JN-1 Back Apron -The JN-1 Back Apron is the paved area including where we are standing.

JN-1 Sheep Shed - The corrugated steel building to the south is the JN-1 Sheep Shed which is primarily used for low level waste storage.

JN-1 Dilution Sump - The JN-1 Dilution Sump became contaminated from past operations.

Breathing Air System Behind JN-1 - The Breathing Air System is under the weather protection cover behind JN-1. We will see additional Breathing Air System equipment inside. It is used by the BCLDP.

Hatch to Evaporator Storage Tank - The hatch to the north provides access to the Evaporator Storage Tank which is used to store radioactively contaminated water, such as that from the Radio-Analytical Laboratory in building JN-2. The water is sampled prior to being pumped to the Evaporator Pan to assure the contamination is within regulatory limits.

STOP

22. Return through back door of JN-1 (Need Lights on in all areas discussed.)

Charpy Cell - The Charpy Cell, which is spelled C h a r p y, is named after a test which was performed there. There are 74 wells in the floor of the Charpy Cell. So far, 66 have been cleaned out, that is, the debris has been removed, and have been filled with foam to fix any remaining contamination in place.

(PAUSE)

The Breathing Air System indoors portion is located on the east end of this area.

STOP

Evaporator Room - An Evaporator Pan inside the Evaporator Room behind this window is used to thermally evaporate water with radioactive contamination below regulated limits. The current use includes water such as that from the RAL and that used for water washing to

decontaminate equipment and facilities.

STOP

Back Dock - This is the Back Dock or Loading Dock. The Old Back Dock is on the other side of the door to the west which leads to the Controlled Access Area.
Hatchway - This Hatchway at the north end of the Back Dock provides access to the Alpha/Gamma Cells below.
Waste Storage Shed - The Waste Storage Shed is east of the Back Dock. Within it is the Waste Storage Vault which is used for storage of higher dose materials.

STOP

23. Alpha/Gamma Cells (Need Lights on in all areas discussed.)
Alpha /Gamma Cells - The Alpha /Gamma Cells have all been removed and disposed of. The cells were individual shielded cells with manipulators and they were located between the vertical supports along the west wall. Some utilities remain. There is a hatch in the ceiling to the north which provides access to the Back Dock above. Water has been observed on the floor at times.

STOP

24. Old Operations Area and Adjacent Areas (Need Lights on in all areas discussed.)
From the Old Operations Area, several other areas can be observed.
The Controlled Access Area can be seen through the window looking east.
The Hot Equipment Storage Room can be seen through the window looking north and it is accessed from the Controlled Access Area.
The Storage Pit is also called the Fuel Storage Pool - The cover over the pool can be seen in the Controlled Access Area. The pool has been emptied and a decontamination process used.

STOP

High Level Cell - The High Level Cell is typical of the former hot cells in this building. The conditions are very similar. The material, the utilities, the cranes, the shield windows, the shield doors, lead plugs and manipulators have been removed. A decontamination process has been used: The cells have been scrubbed with water and painted to fix any remaining contamination.

High Level Subcell - The hatches leading down to the High Level Subcell can be seen in the floor of the Old Operations Area.
STOP

The High Level and Low Level Cells, as seen from the west, are mirror images of each other with a common wall in the center.

The Low Level Cell is in a condition very similar to the High Level Cell.

(PAUSE)

The hatch leading down to the Low Level Subcell is also in the floor of the Old Operations Area.

STOP

Mechanical Test Cell - The Mechanical Test Cell has been cleaned out and painted similar to the High Level Cell.

STOP

25. High Energy Cell Operations Area (Need Lights on in all areas discussed.)

The High Energy Cell is also referred to as the HEC.

From inside the HEC Operations Area, looking south, the brick wall of the original JN-1A construction can be seen. The HEC Operations area can be seen to be constructed of concrete block.

High Energy Cell - The HEC is being cleaned out and painted similar to the High Level Cell. The construction photographs of the HEC show that it was constructed by first fabricating a shell with steel plate and steel reinforcement bars and then filling the shell with concrete. Construction photos are being made available on the Ohio Field Office web site. The thickness of the HEC walls can be seen where the shield windows have been removed. The HEC is two stories high with a mezzanine on the top. Access holes through the mezzanine floor, which is the HEC roof, are covered by steel plate. The original massive concrete plugs used for access, and were initially in the access holes, have been removed and disposed of. Facing the HEC, a doorway can be seen on the right leading to the Cask Washdown Room. On the left, in the floor of the HEC is a hatch leading to the 48 ft. deep pool located behind the HEC to the left.

STOP

26. High Bay Area (Need Lights on in all areas discussed.)
High Bay Area - Past operations involved driving trucks into the High Bay Area, off loading casks containing reactor fuel into the pool, decontaminating the casks in the Cask Washdown Room and reloading them onto the trucks for return shipment. The fuel could then be transferred into the HEC through the hatch in the floor. The pool is 48 ft deep, 43 ft below floor level, and is lined with sheet stainless steel. After the water in the pool was removed, a decontamination process was used for the stainless steel liner. The concrete surface behind the stainless steel liner has not been radiologically characterized.

TransuranicWaste Storage - The Transuranic (or TRU) Waste is stored both in the pool as well as in the Dufrane Units which are located here in the High Bay Area. The pool is currently being

used for shielded storage of Remote Handled Transuranic waste drums which are ready to be shipped. The Dufrane Units, or the large concrete cylindrical containers on the floor in the High Bay Area, are also used for shielded storage of Transuranic waste drums which are ready to be shipped. Since the schedule for shipment of TRU waste is uncertain, alternative contingency plans are being considered.

STOP

27. Exiting JN-1 through the Control Point
This concludes the JN-1 portion of the familiarization tour. We will exit through the Control Point. Your tour guide will demonstrate use of a frisker to check hands, feet and hand carried materials; use of a full body monitor; and reading individual dose measurement devices. We will then sign out the Radiation Work Permit.

STOP

(Collect the hard hats and safety toes at the Control Point.)

28. JN-10 and JN-11
JN-10 and JN-11 are government furnished offices. A description of the government furnished office space will be provided on the Ohio Field Office web site.

As previously mentioned, the Ohio Field Office web site is also providing radiological conditions including smearable and fixed contamination, beta/gamma readings and hot particle potential inside the buildings. The soil areas have been characterized radiologically by taking samples within a grid pattern at various depths. Concentrations of isotopes in soil samples are being provided on the web site.

This concludes the familiarization tour.

STOP

(Return to JN-10, drop off the TLD and PIC at Dosimetry, return to the Cafeteria and collect question cards, visitor badges and any safety glasses provided.)